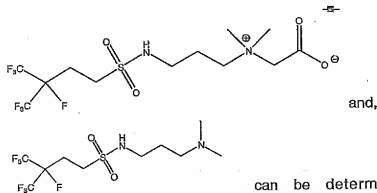


and the filtrate evaporated to dryness to provide the aminoxide of the  $R_F$ -surfactant.

In accordance with another embodiment of the disclosure, processes are provided that can be used to alter the surface tension of a part of a system having at least two parts. The system can include liquid/solid systems, liquid/gas systems, gas/solid systems, and/or liquid/liquid systems. In an exemplary embodiment, the liquid/liquid systems can have one part that includes water and another part that includes a liquid that is relatively hydrophobic when compared to water. According to another example, the liquid/liquid system can contain one part that is relatively hydrophobic when compared to water and/or relatively hydrophobic when compared to another part of the system.  $R_F$ -surfactants can be used to alter the surface tension of a part of the system, for example, by adding the  $R_F$ -surfactant to the system.

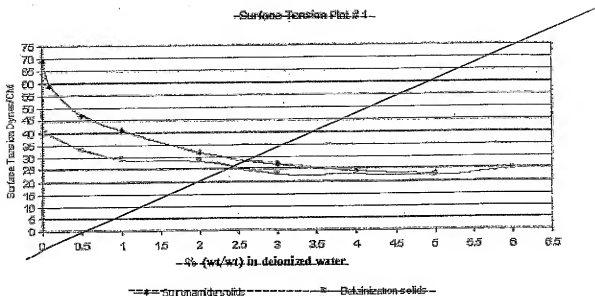
$R_F$ -surfactants may be used as relatively pure solutions or as mixtures with other components. For example, and by way of example only, the  $R_F$ -surfactants can be added to a system and the surface tension of the system determined by the Wilhelmy plate method and/or using the Kruss Tensiometer method.

The surface tensions of solutions of

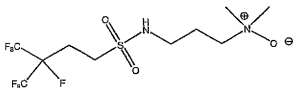


can be determined, according to the

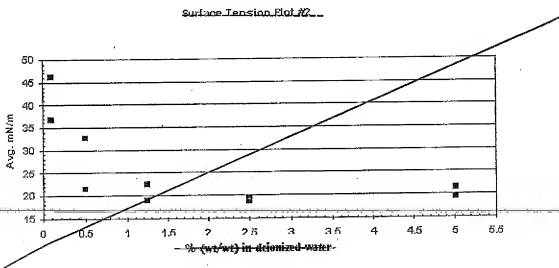
concentrations in Plot #1 below, as shown in Fig. 9.



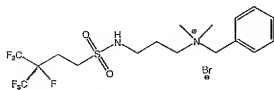
As another example, the surface tensions of



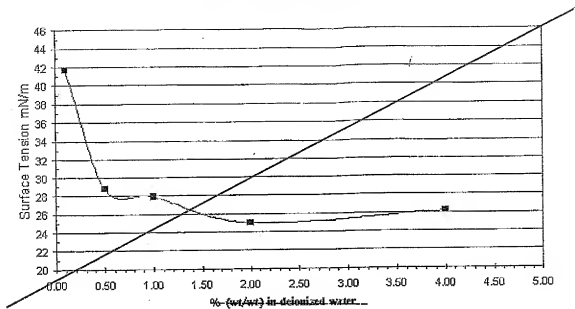
at pH 7<sup>m</sup> and pH 5<sup>m</sup> various concentrations can be determined and the data as indicated in Plot #2 below as shown in Fig.10.



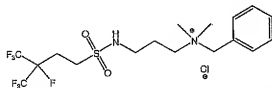
As another example, the surface tensions of



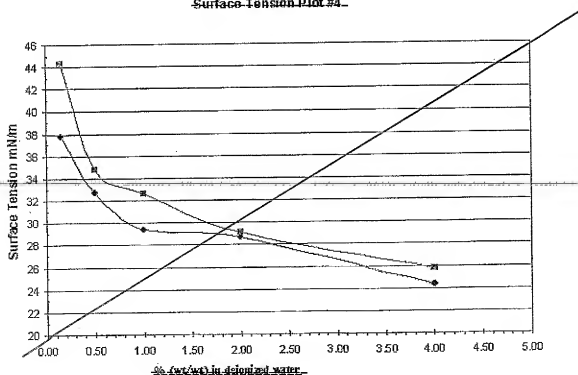
at various concentrations can be determined and the data as indicated in the Plot #3 below as shown in Fig.11.

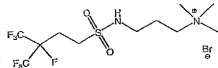
~~Surface Tension Plot #3~~

As another example, the surface tensions of



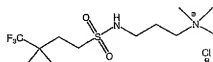
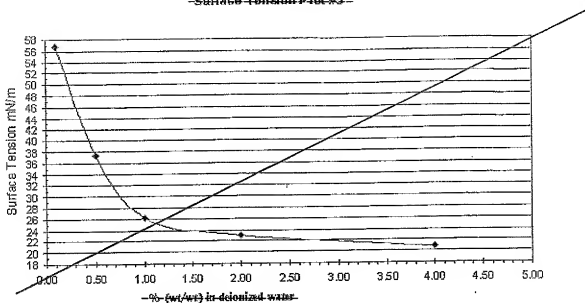
at pH 6.8  $\blacklozenge$  and pH 4.0  $\blacksquare$  can be determined and the data as indicated in Plot #4 below, as shown in Fig. 12.

~~Surface Tension Plot #4~~



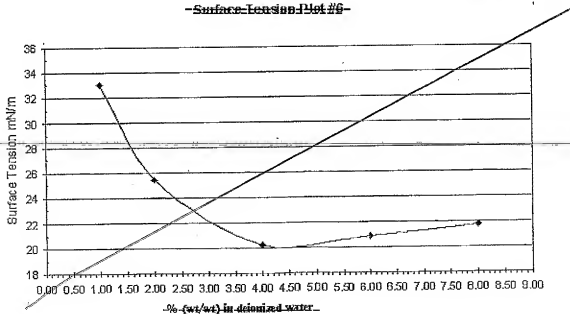
As another example, the surface tensions of various concentrations can be determined and the data as indicated in Plot #5 below, as shown in Fig. 13.

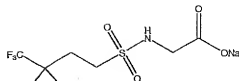
**-Surface Tension Plot #5-**



As another example, the surface tensions of various concentrations can be determined and the data as indicated in Plot #6 below, as shown in Fig. 14.

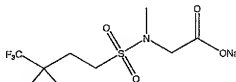
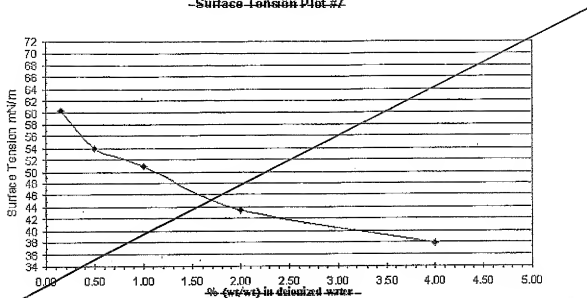
**-Surface Tension Plot #6-**



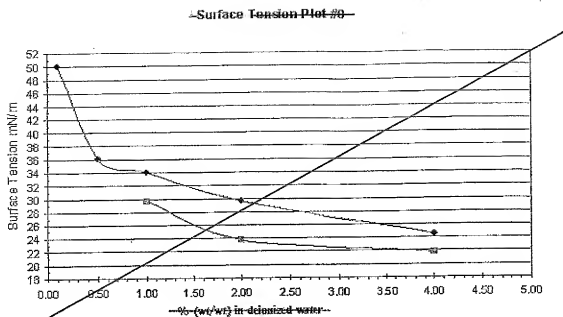


As another example, the surface tensions of FC(F)(F)CCS(=O)(=O)NC(=O)O[Na] at various concentrations can be determined and the data as indicated in Plot #7 below—  
as shown in Fig. 15.

—Surface Tension Plot #7—



As another example, the surface tensions of CC(C)S(=O)(=O)NC(=O)O[Na] at pH 6.2-6.8 and pH 5.0 can be determined and the data as indicated in Plot #8 below—  
as shown in Fig. 16.



Surface tensions and corresponding concentrations of R<sub>F</sub>-surfactants are denoted in Table 6 below.